REMARKS

The Office Action dated April 13, 2006 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1-24 are currently pending in the application.

Claims 1 and 13 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added and no new issues are raised which require further consideration or search. Claims 1-24 are respectfully submitted for consideration.

In the Office Action, claims 1-5, 11-17, and 23-24 were rejected under 35 U.S.C. §102(e) as being anticipated by Bar-Niv (U.S. Patent No. 6,442,142). The rejection is respectfully traversed for the reasons which follow.

Claim 1, upon which claims 2-12 are dependent, recites a method of regulating transceiver power consumption for a transceiver in a communications network. The method includes monitoring data received by the transceiver to detect the presence or absence of a received data signal, and controlling a transceiver state machine to regulate transceiver power consumption in response to the presence or absence of the data received. The transceiver state machine includes a wake-up control and a power down control. The wake-up control is configured to send power control signals to a transmitter and the power down control is configured to send power control signals to all components of the transceiver.

Claim 13, upon which claims 14-24 are dependent, recites a transceiver power consumption regulator for a transceiver in a communications network. The transceiver power consumption regulator includes a data received monitor located on the transceiver to detect the presence or absence of a received data signal, and a transceiver state machine coupled between the data received monitor and transceiver components to regulate transceiver power consumption of the transceiver in response to the presence or absence of the data received detected by the data received monitor. The transceiver state machine includes a wake-up control and a power down control. The wake-up control is configured to send power control signals to a transmitter and the power down control is configured to send power control signals to all components of the transceiver.

The present invention provides several distinct advantages over the prior art. For example, in one embodiment, signal detection may send a received signal to the auto power down system. The auto power down system is coupled via power control lines to every component of the transceiver and may control whether the component is drawing current from the computer power source. The auto power down system sends one or more power control signals to components of the transceiver to control whether the component is drawing current. Every component of the transceiver is responsive to and draws current based on the power control signal. The power control signal is continuously transmitted to the components of the transceiver. The receiving component will either begin drawing current or stop drawing current from the computer power

source in response to the power control signal. The advantages discussed above are merely an example of some of the advantages provided by the present invention.

As will be discussed below, the cited reference of Bar-Niv fails to disclose or suggest the elements of the claims, and therefore fails to provide the advantages and features discussed above.

Bar-Niv discloses a base-band receiver energy detection system. The signal energy detection system includes a digital filter which analyzes incoming pulses at a plurality of times to make an initial determination of signal energy on a communication line. The initial determination is further analyzed in a signal validation machine, which checks a time interval between consecutive signals found in the initial determination, in order to make an accurate final determination of the presence of valid signal energy on the communication line.

Applicants respectfully submit that Bar-Niv fails to disclose or suggest all of the elements of the presently pending claims. For example, Bar-Niv fails to disclose or suggest "wherein the transceiver state machine includes a wake-up control and a power down control, the wake-up control being configured to send power control signals to a transmitter and the power down control being configured to send power control signals to all components of the transceiver," as recited in claims 1 and 13.

In the Response to Arguments section of the Office Action, it is stated that "Bar-Niv discloses a signal, which controls whether all of the transceiver circuitry is to be powered down [ENERGYON, column 6, lines 21-31], but does not disclose that the

signal actually powers down the transceiver circuitry... The power module sends power control signals to power down the transceiver circuitry when the ENERGYON signal is at level 0" (Office Action, page 7, line 20 – page 8, line 4). Applicants respectfully assert, however, that an ENERGYON signal which results in a power down of the transceiver circuitry when set to 0 does not correspond to the recited limitations of claims 1 and 13.

Applicants respectfully submit that the present claims recite, in part, a wake-up control configured to send power control signals to a transmitter and a power down control being configured to send power control signals to all components of the transceiver. The use of an ENERGYON signal by Bar-Niv to determine whether the transceiver circuitry is awake or powered down, does not anticipate a wake-up control configured to send power control signals to a transmitter and a power down control configured to send power control signals to all components of the transceiver, as recited in the present claims. As recited in the current claims and supported in the specification, the claimed invention provides both a wake-up control and a power down control. The wake-up control, included in the transceiver state machine of the present invention, sends power control signals to a transmitter. The power down control of the present invention sends power control signals to all components of the transceiver, except the transmitter and signal detection. The power control signal being sent is automatically determined in response to the presence or absence of an energy detect signal (Specification, Page 8, lines 17-27).

Bar-Niv clearly fails to disclose or suggest a transceiver state machine which includes a wake-up control or a power-down control. More specifically, Bar-Niv does not disclose a wake-up control that sends power control signals to a transmitter and a power down control that sends power control signals to all components of the transceiver. As mentioned above, the Office Action takes the position that the ENERGYON signal of Bar-Niv corresponds to the wake-up control and power down control of the claimed invention. Applicants respectfully submit that the Office Action has not addressed the individual elements of the claims, which are not disclosed by Bar-Niv.

Bar-Niv merely discloses that "when the ENERGYON signal is at level 1, module 30 supplies power to transceiver circuitry 32. When the ENERGYON signal is at level 0, module 30 powers down circuitry 32" (Bar-Niv, Column 6, lines 29-32). The ENERGYON signal of Bar-Niv does not correspond to the wake-up control and power down control of the present invention. The present claims specifically recite that the wake-up control sends power control signals to a transmitter, while the power down control sends power control signals to all components of the transceiver. Bar-Niv does not disclose or suggest a wake-up control that sends power control signals to a transmitter nor does it disclose or suggest a power down control that sends power control signals to all components of the transceiver, except the transmitter and signal detection. Bar-Niv only discloses a single signal which powers down the entire transceiver circuitry when its signal is at 0.

For at least the reasons discussed above, Applicants respectfully submit that Bar-Niv fails to disclose or suggest all of the elements of present claims 1 and 13. Therefore, Applicants respectfully request that the rejection of claims 1 and 13 be withdrawn.

Furthermore, Applicants submit that claims 2-5 and 11-12 are dependent upon claim 1, while claims 14-17 and 23-24 are dependent upon claim 13. Thus, claims 2-5, 11-12, 14-17, and 23-24 should be found allowable for at least their dependence upon claims 1 and 13, respectively, and for the specific limitations recited therein.

Claims 6-10 and 18-22 were rejected under 35 U.S.C. 103(a) as being unpatentable over Bar-Niv, in view of Uppunda (U.S. Patent No. 6,678,728). The Office Action took the position that Bar-Niv discloses all the elements of claims 6-10 and 18-22, with the exception of controlling the transceiver to transmit link determination signals to devices on the communications network when the transceiver is in a power-down mode. The Office Action then relies upon Uppunda as allegedly curing this deficiency in Bar-Niv. The above rejection is respectfully traversed for the reasons which follow.

Bar-Niv is discussed above. Uppunda discloses a method and apparatus for automatically loading device status information into a network device. An embodiment of the invention includes an apparatus in a network device that enters a sleep state under particular conditions. The apparatus includes a buffer for storing data that is to be transmitted and a memory device that stores configuration data. The configuration data is loaded to the apparatus each time the network device is powered up.

Applicants note that claims 6-10 and 18-22 are dependent upon claims 1 and 13, respectively. In addition, as stated above, Bar-Niv does not disclose or suggest all of the elements of independent claims 1 and 13. Applicants submit that Uppunda, like Bar-Niv, also fails to disclose or suggest a transceiver state machine that includes at least one of a wake-up control and a power down control. As such, Uppunda fails to cure the deficiencies in Bar-Niv discussed above. Consequently, the combination of Bar-Niv and Uppunda fails to disclose or suggest all of the elements of claims 6-10 and 18-22 which are dependent upon claims 1 and 13, respectively. Furthermore, applicants respectfully submit that claims 6-10 and 18-22 should be found allowable for at least their dependence on claims 1 and 13, respectively, and for the specific limitations recited therein.

For at least the reasons discussed above, Applicants respectfully submit that Bar-Niv and Uppunda, whether considered alone or in combination, fail to disclose or suggest all of the elements of the claimed invention. These distinctions are more than sufficient to render the claimed invention unanticipated and unobvious. It is therefore respectfully requested that all of claims 1-24 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

_____
Majid S. AlBassam
Registration No. 54,749

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

MSA:jf